- (3) Is sufficiently ductile to resist cracking;
- (4) Has enough strength to resist damage due to handling and soil stress; and
- (5) Supports any supplemental cathodic protection.

In addition, if an insulating-type coating is used it must have low moisture absorption and provide high electrical resistance.

(b) All pipe coating must be inspected just prior to lowering the pipe into the ditch or submerging the pipe, and any damage discovered must be repaired.

§195.242 Cathodic protection system.

- (a) A cathodic protection system must be installed for all buried or submerged facilities to mitigate corrosion that might result in structural failure. A test procedure must be developed to determine whether adequate cathodic protection has been achieved.
- (b) A cathodic protection system must be installed not later than 1 year after completing the construction.

§195.244 Test leads.

- (a) Except for offshore pipelines, electrical test leads used for corrosion control or electrolysis testing must be installed at intervals frequent enough to obtain electrical measurements indicating the adequacy of the cathodic protection.
- (b) Test leads must be installed as follows:
- Enough looping or slack must be provided to prevent test leads from being unduly stressed or broken during backfilling.
- (2) Each lead must be attached to the pipe so as to prevent stress concentration on the pipe.
- (3) Each lead installed in a conduit must be suitably insulated from the conduit.

§ 195.246 Installation of pipe in a ditch.

- (a) All pipe installed in a ditch must be installed in a manner that minimizes the introduction of secondary stresses and the possibility of damage to the pipe.
- (b) Except for pipe in the Gulf of Mexico and its inlets, all offshore pipe in water at least 3.7 m (12 ft) deep but

not more than 61 m (200 ft) deep, as measured from the mean low tide, must be installed so that the top of the pipe is below the natural bottom unless the pipe is supported by stanchions, held in place by anchors or heavy concrete coating, or protected by an equivalent means.

[Amdt. 195-22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195-52, 59 FR 33397, June 28, 1994; 59 FR 36256, July 15, 1994]

§195.248 Cover over buried pipeline.

(a) Unless specifically exempted in this subpart, all pipe must be buried so that it is below the level of cultivation. Except as provided in paragraph (b) of this section, the pipe must be installed so that the cover between the top of the pipe and the ground level, road bed, river bottom, or sea bottom, as applicable, complies with the following table:

Location	Cover (inches)	
	For normal exca- vation	For rock exca- vation 1
Industrial, commercial, and residential areas	36	30
Crossings of inland bodies of water with a width of at least 100 ff from high water mark to high water mark	48	18
roads	36	36
Deepwater port safety zone	48	24
Gulf of Mexico and its inlets and other off- shore areas under water less than 3.7 m (12 ft) deep as measured from the		
mean low tide	36	18
Any other area	30	18

¹Rock excavation is any excavation that requires blasting or removal by equivalent means.

- (b) Except for the Gulf of Mexico and its inlets, less cover than the minimum required by paragraph (a) of this section and § 195.210 may be used if—
- (1) It is impracticable to comply with the minimum cover requirements; and
- (2) Additional protection is provided that is equivalent to the minimum required cover.

[Amdt. 195-22, 46 FR 38360, July 27, 1981; 47 FR 32721, July 29, 1982 as amended by Amdt. 195-52, 59 FR 33397, June 28, 1994; 59 FR 36256, July 15, 1994]